- 1. (previously presented) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprises:
  - a conductor;
  - a shaft surrounding at least a portion of the conductor;
  - a non-conductive braid connected with the shaft; and
- an ultrasound transducer connected with the shaft and electrically connected with the conductor

wherein the ultrasound transducer is positioned in a tip portion of the shaft, the tip portion of the shaft being free of the non-conductive braid.

- 2. (original) The catheter of Claim 1 wherein the non-conductive braid comprises a braid of mono-filament material.
- 3. (original) The catheter of Claim 1 wherein the non-conductive braid comprises mono-filament nylon material.
- 4. (original) The catheter of Claim 1 wherein the non-conductive braid comprises a material selected from the group consisting of: glass, plastic, nylon and combinations thereof.
- 5. (original) The catheter of Claim 1 wherein the non-conductive braid is embedded within the shaft.
- 6. (original) The catheter of Claim 1 wherein the shaft is free of electrically conductive material.
- 7. (original) The catheter of Claim 1 wherein the shaft comprises a tip portion fused to a body portion, the non-conductive braid connected with the body portion.
- 8. (original) The catheter of Claim 1 wherein the non-conductive braid comprises a configuration selected from the group consisting of: spiral, diamond weave and combinations thereof.

9. (original) The catheter of Claim 1 further comprising a dielectric film adjacent an emitting surface of the ultrasound transducer.

10-14. (canceled)

15. (currently amended) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprising:

a catheter shaft;

an ultrasound transducer connected with the catheter shaft;

a lens adjacent the ultrasound transducer, the lens having a focus; and

a dielectric solid film adjacent the ultrasound transducer, the dielectric solid film comprising a polyester film.

- 16. (previously presented) The catheter of Claim 15 wherein the dielectric film is positioned between the lens or window and the ultrasound transducer.
- 17. (original) The catheter of Claim 15 wherein the dielectric film comprises a tape material.

18. (canceled)

- 19. (previously presented) The catheter of Claim 15 wherein the polyester film comprises Mylar.
- 20. (original) The catheter of Claim 15 wherein the dielectric film comprises a film having a thickness less than 7 microns.
  - 21. (currently amended) The catheter of Claim 15 wherein:
    the <u>catheter</u> shaft comprises a tip portion;
    the ultrasound transducer connects with the tip portion; and
    the dielectric film wraps around a circumference of the ultrasound transducer.
- 22. (original) The catheter of Claim 15 wherein the dielectric film is positioned adjacent an emitting surface of the ultrasound transducer.

- 23. (original) The catheter of Claim 15 further comprising a non-conductive braid connected with the shaft.
- 24. (previously presented) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprising:

a shaft:

an ultrasound transducer connected within the shaft; and

a dielectric solid film positioned between a portion of the shaft and the ultrasound transducer, wherein the dielectric surrounds at least a portion of a circumference and one end of the ultrasound transducer, the dielectric solid film having a thickness less than 7 microns.

- 25. (original) The catheter of Claim 24 further comprising a lens adjacent the ultrasound transducer, wherein the dielectric film is positioned between the lens and the ultrasound transducer.
- 26. (original) The catheter of Claim 24 wherein the dielectric film comprises a polyester film.
  - 27. (cancelled)
- 28. (original) The catheter of Claim 24 further comprising a non-conductive braid connected with the shaft.
- 29. (previously presented) A medical catheter for insertion into a body, the catheter comprising:

a shaft;

an electrical conductor connected with a transducer within the shaft; and a non-conductive braid connected with the shaft to transmit torque to the shaft wherein the ultrasound transducer is positioned in a tip portion of the shaft, the tip portion of the shaft being free of the non-conductive braid.

30. (original) The catheter of Claim 29 wherein the non-conductive braid comprises a braid of mono-filament material.

- 31. (original) The catheter of Claim 29 wherein the non-conductive braid comprises mono-filament liquid crystal polymer material.
- 32. (original) The catheter of Claim 29 wherein the non-conductive braid comprises a material selected from the group consisting of: glass, plastic, nylon and combinations thereof.
- 33. (original) The catheter of Claim 29 wherein the non-conductive braid is embedded within the shaft.
  - 34. (previously presented) The catheter of Claim 29 further comprising: an ultrasound transducer electrically connected to the conductor.
- 35. (original) The catheter of Claim 29 further comprising a control within the shaft.
- 36. (original) The catheter of Claim 1 wherein the non-conductive braid comprises liquid crystal polymer material.
  - 37-43. (cancelled)
- 44. (previously presented) The catheter of Claim 15 wherein the dielectric surrounds at least a portion of a circumference and one end of the ultrasound-transducer.
  - 45-47. (cancelled)
- 48. (currently amended) A medical diagnostic ultrasound catheter for imaging from within a body, the catheter comprising:
  - a catheter shaft;
  - an ultrasound transducer connected with the catheter shaft;
- a dielectric film positioned between a portion of the <u>catheter</u> shaft and the ultrasound transducer; and
- a lens adjacent the ultrasound transducer, wherein the dielectric film is positioned between the lens and the ultrasound transducer.

- 49. (new) The catheter of Claim 48 further comprising a flexible circuit between the ultrasound transducer and the lens, the dielectric film being separate from the flexible circuit.
- 150. (new) The catheter of Claim 16 further comprising a flexible circuit between the ultrasound transducer and the lens, the dielectric film being separate from the flexible circuit.